

HINGE ROD RETENTION CLIPS IN MODULAR PLASTIC CONVEYOR BELT EDGES

Abstract

An edge module for a modular plastic conveyor belt providing a self-closing retention system for retaining headless hinge rods in modular plastic conveyor belts. The edge module has an opening in an outer edge portion of the module that receives a rod retention member. The rod retention member is movable from a blocking position occluding a hinge rod passageway through interleaved hinges of consecutive rows of belt modules to an unblocking position clear of the passageway. The rod retention member is hook-shaped with a flexible shank extending from a bend at one end to an enlarged head at the other end. The bend serves as a clip for attaching to a post formed in the opening. The head occludes the passageway in the blocking position. By flexing the shank, the head is moved out of the way to admit a rod into the passageway. Once the rod clears the head, the shank springs the head back into the blocking position. The rod retention member is moved to the unblocking position in two ways: by the force of a hinge rod against a contoured face on the head during insertion

of the rod into a belt; or manually by a tool prying the shank.